



State Water Resources Control Board



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TO: James D. Marshall
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Central Valley Regional Water Quality Control Board

FROM: Renan Jauregui
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DATE: 6/26/06

SUBJECT: COMMENTS ON TENTATIVE WASTE DISCHARGE REQUIREMENTS
NPDES PERMIT NO. CA0079154 AND TIME SCHEDULE ORDER FOR THE CITY OF
TRACY WASTEWATER TREATMENT PLANT, SAN JOAQUIN COUNTY

The State Water Board staff has reviewed the tentative NPDES Permit and Time Schedule Order for the City of Tracy Wastewater Treatment Plant. Staff has some concerns with regards to the lack of an effluent limitation for Electrical Conductivity (EC) in the tentative permit. The proposed permit concludes there is Reasonable Potential (RP) for the effluent to exceed the EC southern Delta D-1641 objectives and that dilution is not available. However, it does not establish a final effluent limitation but instead includes the following:

- a) Best Practicable Treatment or Control (BPTC) of Salinity (three years for completion);
- b) An EC Study (3.5 years for completion);
- c) A Pollution Prevention Plan for Salinity (2.5 years for completion);
- d) EC reduction goal of 1350 $\mu\text{mhos/cm}$ as a monthly average to be achieved in five years; and
- e) An interim effluent limit for EC of 2265 $\mu\text{mhos/cm}$ as a daily maximum.

According to 40 CFR 122.44 (d) (iii), when it is determined that a discharge causes, **has the reasonable potential to cause**, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit **must** contain effluent limits for that pollutant. In this case, there is RP for the discharge to exceed the EC southern Delta D-1641 objectives and, therefore, the permit must include effluent limitations for EC.

The Regional Board could however, conclude that the southern Delta D-1641 objectives are not applicable to the Tracy discharge at this time because of the reasons detailed in the permit and summarized as follows: First, the lengthy record of prior State Board decisions and water quality control plans for the Delta establish that the salinity problems in

the southern Delta are the result of many inter-related conditions, including water diversions upstream of the Delta, water diversions within the Delta for export and local use, high levels of salinity in irrigation return flows discharged to Delta waterways and tributaries, groundwater inflow, seasonal flow variations, and tidal conditions. Second, although discharge of treated wastewater to the Delta or its tributaries under an NPDES permit can affect EC in the southern Delta, previous State Board decisions and water quality control plans do not discuss treated effluent discharges as a source of salinity in the southern Delta. Similarly, previously adopted implementation programs for complying with the EC objectives in the southern Delta have focused primarily on providing increased flows and reducing the quantity of salts delivered to the Delta and its tributaries by irrigation return flows and groundwater. The record also establishes that the implementation date for actions to implement the 700 $\mu\text{mhos/cm}$ EC objective for April through August has been repeatedly postponed and that the State Board has adopted a report recommending review of southern Delta EC objectives. Revised Water Right Decision 1641 placed primary responsibility for meeting the EC objectives protective of the AGR use on the Department of Water Resources and the Bureau of Reclamation, but did not require those agencies to implement the 700 $\mu\text{mhos/cm}$ EC objective until April 1, 2005, which has now passed.

The State Board acknowledges that the southern Delta EC objectives have not been reviewed to date and, thus, its application is not clearly defined and the objectives could very well change. Therefore the tentative permit should clearly indicate that the southern Delta D-1641 objectives for EC at this time cannot be used to determine RP. However, there are other applicable water quality objectives to determine RP and at the very least the permit should protect the MUN use by considering the EC Maximum Contaminant Levels (MCLs) ranges of 900 $\mu\text{mhos/cm}$ (recommended), 1600 $\mu\text{mhos/cm}$ (upper), and 2200 $\mu\text{mhos/cm}$ (short term). The effluent discharged also exceeds these objectives and, thus, has RP to exceed these levels in the receiving water. Therefore, effluent limits must be established.

In addition, a major contributor of salts to the City's wastewater treatment plant is Leprino Foods Company (Leprino), a local cheese manufacturer, which leases two aerated lagoons and one unlined oxidation pond from the City for pretreatment of its industrial food processing wastewater but provides no treatment for salts. As indicated in the tentative permit, the industrial wastewater from Leprino and other process waters from the main facility are stored in the unlined industrial ponds and returned to the primary sedimentation basins of the treatment plant. Not only can this operation degrade groundwater, but it can also continue to add salt in the effluent discharged to Old River. The Regional Board has the obligation to protect beneficial uses and adopt waste discharge requirements, specifically establish effluent limitations, that adequately control pollutants from entering receiving waters and impact beneficial uses. By not including an effluent limitation for EC at this time, the Regional Board would be dismissing its regulatory responsibility and allowing additional time for the City and Leprino to continue to have an economic advantage at the expense of impacting the MUN beneficial use of Old River.

The Regional Board may consider the southern Delta D-1641 EC objectives for protection of the AGR use not applicable at this time due to the many factors involved, however, it cannot ignore the drinking water MCLs to protect the MUN use and should at a minimum establish effluent limitations based on the MCLs in accordance with the Basin Plan chemical constituents objective. State Board staff strongly recommends that the Regional Board include effluent limitations for EC.

If you have any questions, please call me at (916) 341-5505 or you may e-mail me at rjauregui@waterboards.ca.gov.